Assume that Riften Enterprises always has earnings before interest and taxes of $10 million per year and that the total value of Riften is currently $100 million. Assume also that Riften’s current interest expense equals $10 million per year. Finally, assume that the corporate tax rate is 35%, the personal tax rate on dividends and capital gains is 20%, and the personal tax rate on interest income is 45%.

a. Calculate Riften’s value if it issues an additional $5 million of equity and uses the proceeds to retire $5 million of debt.

b. Calculate Riften’s value if it issues an additional $10 million of debt and uses the proceeds to repurchase $10 million of shares.

Comment: Think very carefully before answering parts c. and d. below.

c. How would a reduction in the corporate tax rate affect Riften’s optimal level of debt? Briefly explain.

d. How would a reduction in the personal tax rate on interest income affect Riften’s optimal level of debt? Briefly explain.

Wall Street Journal Questions are on the back of this page.